

him incompetent to perform the ordinary duties of a qualified member of the engine department. In this event the applicant shall be required to undergo an examination to determine his competency.

[CGFR 65-50, 30 FR 16640, Dec. 30, 1965, as amended by USCG-1998-4442, 63 FR 52189, Sept. 30, 1998]

§ 12.15-7 Service or training requirements.

(a) An applicant for a certificate of service as qualified member of the engine department shall furnish the Coast Guard proof of qualification based on six months' service in a rating at least equal to that of wiper or coal passer.

(b) Training programs approved by the Commanding Officer, National Maritime Center, may be substituted for the required service at sea in accordance with the following:

(1) A graduate of a school ship may be rated as qualified member of the engine department upon satisfactory completion of the course of instruction. For this purpose, *school ship* is interpreted to mean an institution which offers a complete course of instruction, including a period of sea training, in the skills appropriate to the rating of qualified member of the engine department.

(2) Training programs other than those classified as a school ship may be substituted for up to one-half of the required service at sea.

(c) To qualify to receive an STCW endorsement for service as a "rating forming part of a watch in a manned

engine-room or designated to perform duties in a periodically unmanned engine-room" on a seagoing vessel driven by main propulsion machinery 750 kW [1,000 hp] propulsion power or more, an applicant shall prove seagoing service that includes training and experience associated with engine-room watchkeeping and involves the performance of duties carried out under the direct supervision of a qualified engineer officer or a member of a qualified rating. The training must establish that the applicant has achieved the standard of competence prescribed in table A-III/4 of the STCW Code, in accordance with the methods of demonstrating competence and the criteria for evaluating competence specified in that table.

[CGD 80-131, 45 FR 69241, Oct. 20, 1980, as amended by CGD 95-072, 60 FR 50460, Sept. 29, 1995; CGD 95-062, 62 FR 34538, June 26, 1997; CGD 95-062, 62 FR 40140, July 25, 1997; USCG-1998-4442, 63 FR 52189, Sept. 30, 1998]

§ 12.15-9 Examination requirements.

(a) Each applicant for certification as a qualified member of the engine department in the rating of oiler, watertender, fireman, deck engineer, refrigeration engineer, junior engineer, electrician, or machinist shall be examined orally or by other means and only in the English language on the subjects listed in paragraph (b) of this section. The applicant's general knowledge of the subjects must be sufficient to satisfy the examiner that he is qualified to perform the duties of the rating for which he makes application.

(b) List of subjects required:

Subjects	Machinist	Refrigerating engineer	Fireman/Watertender	Oiler	Electrician	Junior engineer	Deck engineer
1. Application, maintenance, and use of hand tools and measuring instruments	X	X	X	X	X	X	X
2. Uses of babbit, copper, brass, steel, and other metals	X	X	X	X	X	X	X
3. Methods of measuring pipe, pipe fittings, sheet metal, machine bolts and nuts, packing, etc	X	X	X	X	X	X	X
4. Operation and maintenance of mechanical remote control equipment	X	.....	X	X	X	X	X
5. Precautions to be taken for the prevention of fire and the proper use of firefighting equipment	X	X	X	X	X	X	X
6. Principles of mechanical refrigeration; and functions, operation, and maintenance of various machines and parts of the systems .....	.....	X	.....	X	.....	X	.....
7. Knowledge of piping systems as used in ammonia, freon, and CO ₂ , including testing for leaks, operation of bypasses, and making up of joints .....	.....	X	.....	.....	.....	X	.....